

CLAIM AMENDMENTS

Claims 1 through 11 (canceled)

1 12. (Currently amended) A method of treating colorectal
2 carcinoma having at least one HERG potassium channel in a patient
3 in need of said treatment, which comprises the step of
4 administering to said patient, a therapeutically effective amount
5 of 4-[1-{2-(6-methyl-2-pyridinyl)ethyl-4-
6 piperidinyl}carbonyl]methane-sulfoanilide 2HCl sufficient to treat
7 the colorectal carcinoma having at least one HERG potassium
8 channel.

1 13. (currently amended) The method of treating
2 colorectal carcinoma having at least one HERG potassium channel in
3 a patient as defined in claim 12, wherein prior to treating the
4 patient with a therapeutically effective amount of 4-[1-{2-(6-
5 methyl-2-pyridinyl)ethyl-4-piperidinyl}carbonyl]methane-
6 sulfoanilide 2HCl, the following steps are carried out:

7 (a) obtaining from the patient a biopsy of colorectal
8 tissue, lymph nodes or a sample of body fluid or stool, wherein the
9 colorectal tissue, lymph nodes, body fluid, or stool are free of
10 HERG channels in a patient free of colorectal cancer;

11 (b) detecting as a selective tumor marker any presence of
12 at least one HERG potassium channel in the biopsy of colorectal
13 tissue, lymph nodes, or in the body fluid or stool; and

14 ©) relating any presence of at least one HERG potassium
15 channel in the biopsy or sample as indicating that colorectal
16 carcinoma having at least one HERG potassium channel is present in
17 the patient.

1 14. (new) A method of diagnosing a colorectal carcinoma
2 having at least one HERG potassium channel in a patient suspected
3 of suffering from colorectal cancer, which comprises the steps of:

4 (a) obtaining from the patient a biopsy of colorectal
5 tissue, lymph nodes or a sample of body fluid or stool, wherein the
6 colorectal tissue, lymph nodes, body fluid, or stool are free of
7 HERG channels in a patient free of colorectal cancer;

8 (b) detecting as a selective tumor marker the presence of
9 at least one HERG potassium channel in the biopsy of colorectal
10 tissue, lymph nodes, or in the body fluid or stool; and

11 ©) relating the presence of HERG potassium channel in the
12 biopsy or sample to colorectal carcinoma having at least one HERG
13 potassium channel in the patient.

1 15. (New) The method of diagnosing colorectal carcinoma
2 having at least one HERG potassium channel in a patient defined in
3 claim 14, wherein according to step (b) the selective tumor marker

4 is detected by either reverse transcriptase/polymerase chain
5 reaction or through formation of a detectable complex formed
6 between the HERG potassium channel and an antibody thereto

1 16. (new) The method of diagnosing colorectal carcinoma
2 having at least one HERG potassium channel in a patient defined in
3 claim 14, wherein according to steps (b) and ©) the presence of
4 HERG potassium channel as a selective tumor marker is detected by
5 isolating cellular RNA from the biopsy, treating the isolated
6 cellular RNA with reverse transcriptase to obtain cDNA, performing
7 reverse transcriptase/polymerase chain reaction analysis on the
8 cloned DNA to amplify the cDNA and to detect in the cDNA, a genetic
9 marker for the HERG potassium channel, and relating the presence of
10 the genetic marker for HERG potassium channel to colorectal
11 carcinoma having at least one HERG potassium channel in the
12 patient.

1 17. (new) The method of detecting colorectal carcinoma
2 having at least one HERG potassium channel in a patient defined in
3 claim 14, wherein according to steps (b) and ©) the presence of
4 HERG potassium channel as a selective tumor marker is detected by
5 staining a section of the biopsy, incubating the section of the
6 biopsy with rabbit anti-ERG1 HERG as a primary HERG antibody,
7 capable of reacting with HERG potassium channel to form a complex,

8 treating the complex with a visual aid to visualize the primary
9 HERG antibody, and detecting a homogeneous brown stain indicating
10 that a reaction occurring between the primary HERG antibody and the
11 HERG potassium channel in the biopsy to form a complex, and
12 relating formation of the complex to colorectal carcinoma having at
13 least one HERG potassium channel in the patient.